INVASIVE SPECIES MANAGEMENT WITH VOLUNTEERS
PROJECT PROPOSALS

Name of Project: Mapping and Monitoring of Invasive Plants with Volunteers in support of an Active Invasive Control Project

Refuge/Wetland Management District: Region 1 (Pacific Region), Mid-Columbia River NWR Complex

Project Urgency/Impact: The proposed project will recruit and train full-time volunteers to recognize, locate and map populations of invasive plants as part of a larger station-sponsored program to treat multiple invasive species on the Hanford Reach National Monument and Columbia, Toppenish, McNary, Umatilla, Cold Springs, McKay Creek and Conboy Lake National Wildlife Refuges. This larger station-sponsored program involves the formation and support of a weed treatment "strike team." The mapping efforts of the proposed project will reduce the strike team's search times, increasing their ability to control targeted species at the best biological time. The proposed post-spray monitoring will provide information on efficacy and information for planning of future control activities. Training of the volunteers in the operation of GPS equipment, weed identification, monitoring protocols, and data management will also develop a pool of trained individuals for future invasive plant management activities. The combination of the proposed project and the station-sponsored strike team will help document, monitor, and reduce the incidence of invasive species on refuge lands as a step in the recovery of native shrub-steppe, wetland, and riparian habitats.

Friends Groups, Volunteers and Other Partners: To support the proposed project, the Complex will recruit volunteers from the Friends of Mid-Columbia River Wildlife Refuges, the Columbia Basin Chapter of the Native Plant Society and local college and university biology departments to fill volunteer positions needed to monitor weed control work performed in 2012 and to map new sites in advance of strike team's 2013 work season. The Complex will also team with the local county weed control boards for training.

Survey/Inventory and Post-treatment Monitoring: GPS/GIS technologies and a customized data dictionary will be used to inventory and map the location of invasive species populations on refuge lands in advance of the spray team. This mapping will decrease the search time for the spray team, will aid in quantifying treatment acreages, and will create mapping data that increases our basic knowledge of the extent of infestations. Survey/pre-treatment monitoring will help define the extent of the infestations and provide a baseline for post treatment monitoring and planning of strike team treatments in following years. Monitoring will collect data on changes in the invasive plant populations and native plant communities.

Integrated Pest Management & Early Detection/Rapid Response (ED/RR): The survey and monitoring teams will function as the "scout" force in support of the strike team as we implement our IPM plan to control 20 different invasive plant species.

Criteria for Project Success: Mapping, monitoring, and treatment of 20 species of invasive plants by trained teams of volunteers on approximately 1,475 acres within 22,335 acres across the Complex.

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Budget: $18,345.00

Stipend: $500/ month x 3 months x 6 volunteers = $9,000.00
Teams of two volunteers stationed at:
Toppenish NWR – Toppenish, WA
Columbia NWR – Othello, WA
Umatilla NWR – Irrigon, OR

GPS: 3 GPS units @ $3,115 per unit, (see breakdown below) = $9,345

$1,500	Trimble Juno 5B Handheld
$1,165	TerraSync Professional
$450	Accessories (external antennas, charger adapters, USB & serial cables, batteries, screen protection, etc.